

D. Remarks

The claims are 1-23, with claims 1, 14, 18 and 19 being independent. Claims 22 and 23 have been withdrawn from consideration as being directed to a non-elected invention. Claims 1, 2, 6-8, 10-14, 16 and 18-20 have been amended to address formal issues raised by the Examiner. Support for this amendment may be found throughout the specification. The description of the drawings has been amended to list SEQ ID NOs of nucleotide sequences found in the figures. No new matter has been added. Reconsideration of the present claims is expressly requested.

The specification and the drawings are objected to for allegedly failing to comply with sequence listing requirements under 37 C.F.R. §§ 1.822-1.825. Specifically, the Examiner has indicated that Figs. 15 and 16 show nucleotide sequences, which are not included in the sequence listing submitted with the application or identified by SEQ ID NOs.

In response, Applicants amended the brief description of the drawings section of the specification to include SEQ ID NOs of the sequences found in Figs. 15 and 16. New SEQ ID NO:171, which is in Fig. 15, has been included in the corrected sequence listing filed concurrently with this Amendment. The other sequences found in the drawings were included in the previously filed sequence listing. Therefore this objection should be withdrawn.

Claims 1-21 stand rejected under 35 U.S.C. § 101 as being allegedly directed to non-statutory subject matter. The Examiner has alleged that claims 1-21 are drawn to a process and a program for executing the process. Specifically, the Examiner noted that a statutory process must include a step of a physical transformation, or produce a

useful, concrete, and tangible result. The Examiner has alleged that the present claims do not produce a tangible result such that the claim sets forth a practical application to produce a real-world result.

Claim 1 in the subject application recites an information processing method for designing a DNA probe that identifies probe candidates from the first base sequence data group and second base sequence group, which is a useful, concrete, and tangible real-world result. These identified probe candidates can then be used to design a probe, a DNA array, etc., as disclosed in the specification. Claims 14, 18 and 19 are directed to a device that can identify probe candidates.

With respect to claim 20, the Examiner alleged that this claim is directed to a program *per se*, which is not statutory subject matter. In response, this claim has been amended to recite that the control program is stored on a computer readable medium.

Accordingly, it is clear that claims 1-21 are directed to patentable subject matter and are in compliance with 35 U.S.C. § 101. Thus, the outstanding rejection should be withdrawn.

Claims 1-21 also stand rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite. The Examiner has alleged that it is unclear whether the phrases “formation step” and “formation means” in the claims refer to outputting of data or synthesizing a polynucleotide, or some other result.

In response, the independent claims have been amended to specify that the probe candidates are “identified”. Specifically, the method claims now recite an identification step and the device claims recite an identification means.

The Examiner also alleged that it is unclear what result is produced by the “searching” recited in claims 6, 7, 18 and 19. In response, these claims were amended to clarify that the searching step or means is for searching for partial base sequences, which can be used to identify probe candidates without having to search entire base sequences.

Lastly, the Examiner alleged that the phrase “the head position” in claim 8 has insufficient antecedent basis. Applicants have amended claim 8 for clarification.

In view of the above amendment and remarks, the indefiniteness rejection should be withdrawn.

Applicants believe that all issues have now been resolved. Wherefore, expedient passage of the application to issue is respectfully requested.

Applicants’ undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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